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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,011	01/20/2004	Yoshikazu Muraoka	118379	6831

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OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

CHERRY, STEPHEN J

ART UNIT PAPER NUMBER

2863

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/759,011	MURAOKA, YOSHIKAZU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephen J. Cherry	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,940,982 to Hironaka.

Regarding claim 1, Hironaka discloses a measuring instrument, comprising:  
an arm provided with a detector at a distal end thereof ('982, fig. 1, 18), the arm including a plurality of short arms comprising a first short arm and a second short arm ('982, fig. 1, 14-18); a support for supporting the arm in a manner movable in an axial direction thereof('982, fig. 1, 22); and  
drivers being capable of synchronously moving the first short arm and the second short arm in the axial direction of the first short arm ('982, col. 2, line 43, 68-74, stops drive adjoining sections in a synchronized manner),  
the measuring instrument capable of measuring a dimension of a workpiece based on a position of the detector ('982, abstract),  
the short arms being sequentially disposed on the support in a manner in which the first short arm is accommodated in the support and the second short arm is accommodated in the first short arm, and the short arms being respectively supported in a manner movable relative to one another ('982, fig. 1).

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Regarding claim 2, and in view of the rejection of claim 1 above, Hironaka discloses a measuring instrument, wherein the drivers are synchronous drivers that are synchronously driven, and the first short arm and the second short arm are driven in an interlocking manner ('982, col. 2, line 43, 68-74, stops drive adjoining sections in a synchronized manner).

Regarding claim 3, and in view of the rejection of claim 1 above, Hironaka discloses a measuring instrument, wherein the first short arm being supported by the support and a second short arm being provided next to the first short arm and having the detector at a distal end thereof, and wherein the synchronous driver has a first moving mechanism for moving the first short arm in the axial direction and a second moving mechanism for moving the second short arm in the same direction as the moving direction of the first short arm in synchronization with the first moving mechanism ('982, fig. 1, and col. 2, line 43, 68-74, stops drive adjoining sections in a synchronized manner).

Regarding claim 5, and in view of the rejection of claim 3 above, Hironaka discloses a measuring instrument a measuring instrument according to claim 3, wherein the support and the first short arm are tubular cylinders, and wherein the first short arm is accommodated in the support and the second short arm is accommodated in the first short arm ('982, fig. 1, first tube, 12, held by support, and additional tubes 14-18 accommodated in remaining tubes).

Regarding claim 6, and in view of the rejection of claim 5 above, Hironaka discloses a measuring instrument according to claim 5, further comprising air bearings

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provided between the support and the first short arm and between the first short arm and the second short arm ('982, figure 1, air space between 12, 14, 16 and 18).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,940,982 to Hironaka in view of U.S. Patent 4,989,884 to Goodman.

Regarding claim 7, Hironaka discloses a measuring instrument, comprising: an arm provided with a detector at a distal end thereof ('982, fig. 1, 18), the arm including a plurality of short arms comprising a first short arm and a second short arm ('982, fig. 1, 14-18); a support for supporting the arm in a manner movable in an axial direction thereof ('982, fig. 1, 22); and drivers being capable of synchronously moving the first short arm and the second short arm in the axial direction of the first short arm ('982, col. 2, line 43, 68-74, stops drive adjoining sections in a synchronized manner), the measuring instrument capable of measuring a dimension of a workpiece based on a position of the detector ('982, abstract), the short arms being sequentially disposed on the support in a manner in which

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the first short arm is accommodated in the support and the second short arm is accommodated in the first short arm, and the short arms being respectively supported in a manner movable relative to one another ('982, fig. 1); wherein the first short arm being supported by the support and a second short arm being provided next to the first short arm and having the detector at a distal end thereof, and wherein the synchronous driver has a first moving mechanism for moving the first short arm in the axial direction and a second moving mechanism for moving the second short arm in the same direction as the moving direction of the first short arm in synchronization with the first moving mechanism ('982, fig. 1, and col. 2, line 43, 68-74, stops drive adjoining sections in a synchronized manner).

However Hironaka does not teach the use of a cover.

The claim further describes a flexible cover stretched over the arm, as disclosed by Goodman ('884, fig. 1).

Thus, it would have been obvious to one of ordinary skill in the art to combine the cover of Goodman with the invention of Hironaka to protect the arm from particulate matter ('884, abstract).

### ***Allowable Subject Matter***

Claims 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

Claim 4 recites, "wherein the first moving mechanism has a rack provided on the support along the moving direction of the first short arm, a pinion rotatably provided on the first short arm and meshing with the rack, and a rotation-applying device for rotating a shaft of the pinion, and wherein the second moving mechanism has a first pulley fixed to the shaft of the pinion, a second pulley rotatably supported on the distal end of the first short arm, and a belt wound around the pulleys with a part thereof being jointed with the second short arm.". This feature, in combination with the remaining claimed structure, avoids the prior art of record.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3 and 5-7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (571) 272-2272. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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SJC



MICHAEL NGHIEM  
PRIMARY EXAMINER